

What we already know:

- Animals can be grouped into **vertebrates** (and then further into fish, reptiles, amphibians, birds and mammals) and **invertebrates**
- Some examples of **life cycles** (including those of **plants** and humans)
- The processes of **dispersal, fertilisation and germination**
- **Reproduction** is one of the seven life processes.
- Parts of a **plant**, their features and what their **functions** are.
- The work of David Attenborough.
- The word **metamorphic** means ‘a change of form’ (in the context of rocks)

What's next?

- **Reproduction** is when an animal or plant produces one or more individuals similar to itself:
 - Sexual **reproduction**:
 - requires two parents with **male and female gametes (cells)**
 - will produce **offspring** that is similar to but not identical to the parent
 - Asexual **reproduction**:
 - will produce **offspring** that is identical to the parent
 - requires only one parent

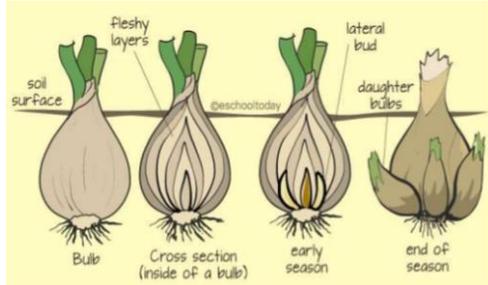
I know that Metamorphosis = to change

I know that some animals undergo complete metamorphosis = completely transform.

I know other animals experience incomplete metamorphosis = go through several different stages, with each stage getting bigger than the last.

I know that insects and amphibians undergo metamorphosis but reptiles, mammals and birds do not

Question linked to MTP (1)



How are tubers, bulbs and runner plants linked?
 These are examples of asexual plant reproduction which involves only one parent
 I know some plants produce an underground food store which develops into next year's plants.
 This is asexual reproduction
 Bulbs, like daffodils, can form small side bulbs at the base of the mother bulb underground which then grow into copies of the parent plant.

Question linked to MTP (3)

- What is **reproduction**?
 Living things that use sexual reproduction have male and female cells
 Sexual reproduction happens when male and female cells join. This is called fertilisation.
- How do **plants reproduce**?
 I know the female reproductive parts are the stigma and ovule
 I know that the male reproductive parts are the stamen and anther
 I know the anthers produce a dry power called pollen
 I know that the female stigma is very sticky and when pollen from another plant touches the sticky stigma, the flower is fertilised and will create seeds in the ovule
 I know that although flowers have both the male and the female reproductive parts, most plants cannot fertilise themselves.
 I know roses, oak tree, pansies, lily, holly trees all reproduce this way
- What are examples of **life cycles**?
 I know different animals have different life cycles. Each life cycle has some similarities and differences.

Question linked to MTP (4,5,6)

What does the work of Jane Goodall tell us about the links between humans and other animals?
 I know in July 1960, at the age of 26, Jane Goodall travelled from England to what is now Tanzania to study chimpanzees
 I know this type of study had not been done before and was considered ground breaking
 I know she immersed herself in their habitat
 I know she observed so carefully that she began to understand them not only as a species, but also as individuals with emotions and long-term bonds
 I know that Dr. Jane Goodall's discovery in 1960 that chimpanzees make and use tools is considered one of the greatest achievements of twentieth-century

Vocab

- Tier One**
- Plant
 - Pollen
 - Seed
 - Bulb
 - Cell

Tier Two

- Flowering
- Function
- Life-cycle
- Mature
- Petal
- Ovary
- Ovule
- Embryo

Tier Three

- Pollination
- Fertilisation
- metamorphosis
- gamete

Question linked to MTP (2 / 3)

Life cycle of a plant:

- **Germination** - Seed starts to grow.
- **Roots** - Roots grow, usually underground.
- **Leaves** - A stem and leaves form. The plant makes its own food (photosynthesis).
- **Flowering** - The pollen in the flowers is used to make seeds.
Seed dispersal - Seeds are spread out so new plants can grow in their own space